Notice of Allowability	Application No.	Applicant(s)	
	10/639,053	MUKHERJEE ET AL.	
	Examiner	Art Unit	
	Minh Dieu Nguyen	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *2/16/2007*.

2. ☒ The allowed claim(s) is/are *1-22*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____. .

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Thomas J. Frame on 4/24/07.

2. The application has been amended as follows:

In claim 1, the paragraph

"a packet gateway operable to retrieve a group profile from an authentication, authorization, and accounting (AAA) server in response to receiving a request from a first end user and to locally cache the group profile, wherein the packet gateway determines if the first end user is authenticated and if the first end user is unauthenticated, then the packet gateway searches a local cache for a profile with network digits of the first end user's MSID, whereby if the profile is not in the local cache or has expired, then the packet gateway purges the expired profile or requests the profile from the AAA server, caches the profile, and marks an expiry time that is provided within the profile, once the profile is in the cache, subsequent users that belong to a same group can be authorized with a realm and with authorization attributes and without involving the AAA server, the packet gateway being operable to provide a service to the first end user based on information included within the group profile and associated with the first end user, wherein the packet gateway is further operable to

receive a request from a second end user and to determine if the second end user is included within the group profile such that in cases where the second end user is included in the group profile the packet gateway can locally cache the group profile in order to provide a service to the second end user without having to communicate with the AAA server."

has been changed to

--a packet gateway operable to retrieve a group profile from an authentication, authorization, and accounting (AAA) server in response to receiving a request from a first end user and to locally cache the group profile, wherein the packet gateway determines if the first end user is authenticated and if the first end user is unauthenticated, then the packet gateway searches a local cache for the group profile associated with network digits of the first end user's mobile station identifier (MSID), whereby if the group profile is not in the local cache or has expired, then the packet gateway purges the expired group profile and requests the group profile from the AAA server, caches the group profile, and marks an expiry time that is provided within the group profile, once the group profile is in the cache, subsequent users that belong to a same group can be authorized with a realm and with authorization attributes and without involving the AAA server, the packet gateway being operable to provide a service to the first end user based on information included within the group profile and associated with the first end user, wherein the packet gateway is further operable to receive a request from a second end user and to determine if the second end user is included within the group profile such that in cases where the second end user is included in the group

profile the packet gateway can locally cache the group profile in order to provide a service to the second end user without having to communicate with the AAA server.--

In claim 8, the paragraph

"providing a service to the first end user based on information included within the group profile and associated with the first end user, wherein the packet gateway determines if the first end user is authenticated and if the first end user is unauthenticated, then the packet gateway searches a local cache for a profile with network digits of the first end user's MSID, whereby if the profile is not in the local cache or has expired, then the packet gateway purges the expired profile or requests the profile from the AAA server, caches the profile, and marks an expiry time that is provided within the profile, once the profile is in the cache, subsequent users that belong to a same group can be authorized with a realm and with authorization attributes and without involving the AAA server;"

has been changed to

--providing a service to the first end user based on information included within the group profile and associated with the first end user, wherein the packet gateway determines if the first end user is authenticated and if the first end user is unauthenticated, then the packet gateway searches a local cache for the group profile associated with network digits of the first end user's mobile station identifier (MSID), whereby if the group profile is not in the local cache or has expired, then the packet gateway purges the expired group profile or requests the group profile from the AAA

server, caches the group profile, and marks an expiry time that is provided within the group profile, once the group profile is in the cache, subsequent users that belong to a same group can be authorized with a realm and with authorization attributes and without involving the AAA server;--

In claim 13, the paragraph

"means for providing a service to the first end user based on information included within the group profile and associated with the first end user, wherein the packet gateway determines if the first end user is authenticated and if the first end user is unauthenticated, then the packet gateway searches a local cache for a profile with network digits of the first end user's MSID, whereby if the profile is not in the local cache or has expired, then the packet gateway purges the expired profile or requests the profile from the AAA server, caches the profile, and marks an expiry time that is provided within the profile, once the profile is in the cache, subsequent users that belong to a same group can be authorized with a realm and with authorization attributes and without involving the AAA server;"

has been changed to

--means for providing a service to the first end user based on information included within the group profile and associated with the first end user, wherein the packet gateway determines if the first end user is authenticated and if the first end user is unauthenticated, then the packet gateway searches a local cache for the group profile associated with network digits of the first end user's mobile station identifier (MSID),

whereby if the group profile is not in the local cache or has expired, then the packet gateway purges the expired group profile or requests the group profile from the AAA server, caches the group profile, and marks an expiry time that is provided within the group profile, once the group profile is in the cache, subsequent users that belong to a same group can be authorized with a realm and with authorization attributes and without involving the AAA server;--

In claim 18, the paragraph

"provide a service to the first end user based on information included within the group profile and associated with the first end user, wherein the packet gateway determines if the first end user is authenticated and if the first end user is unauthenticated, then the packet gateway searches a local cache for a profile with network digits of the first end user's MSID, whereby if the profile is not in the local cache or has expired, then the packet gateway purges the expired profile or requests the profile from the AAA server, caches the profile, and marks an expiry time that is provided within the profile, once the profile is in the cache, subsequent users that belong to a same group can be authorized with a realm and with authorization attributes and without involving the AAA server;"

has been changed to

--provide a service to the first end user based on information included within the group profile and associated with the first end user, wherein the packet gateway determines if the first end user is authenticated and if the first end user is

unauthenticated, then the packet gateway searches a local cache for the group profile associated with network digits of the first end user's mobile station identifier (MSID), whereby if the group profile is not in the local cache or has expired, then the packet gateway purges the expired group profile or requests the group profile from the AAA server, caches the group profile, and marks an expiry time that is provided within the group profile, once the group profile is in the cache, subsequent users that belong to a same group can be authorized with a realm and with authorization attributes and without involving the AAA server;--

Allowable Subject Matter

3. This office action is in response to the communication dated 2/16/2007 with the amendments to claims 1, 8, 13 and 18.

4. Claims 1-22 are allowed.

5. The following is an examiner's statement of reasons for allowance:

The present invention is directed to a system and method for optimizing authentication in a network environment. Each independent claim (claims 1, 8, 13 and 18) identifies the unique distinct feature of once the group profile is in the cache, subsequent users that belong to a same group can be authorized with a realm and with authorization attributes and without involving the AAA server. This ability of caching a group profile locally offers the ability to quickly identify an end user without having to traverse a portion of the network in order to query the AAA server each time a new end

user makes contact with the packet gateway (see specification: page 4, lines 2-6). The closest prior arts of record fail to anticipate or render the above limitations obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu Nguyen whose telephone number is 571-272-3873.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mdn
4/24/07

EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER